COLGATE & COMPANY JERSEY CITY PLANT: B-14
(Colgate-Palmolive Company Jersey City Plant: B-14)
54-48 Grand Street (82-88 Greene Street)
Jersey City
Hudson County
New Jersey

HAER No. NJ-71-N

HAER
NJ
9-JERCI,
18N-

PHOTOGRAPHS

WRITTEN HISTORICAL AND DESCRIPTIVE DATA

HISTORIC AMERICAN ENGINEERING RECORD
Northeast Field Area
Chesapeake/Allegheny System Support Office
National Park Service
U.S. Custom House
200 Chestnut Street
Philadelphia, PA 19106

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Location: 54-48 Grand Street (82-88 Greene Street) Jersey City, Hudson County, New Jersey

Significance: B-14 was the Colgate's principal facility for toilet soap manufacture in Jersey City c1903-86, along with adjacent B-15 (HAER No. NJ-71-O), and also housed plant maintenance shops. Although not an individually significant structure, B-3 was significant as a component of the Colgate plant, and as part of the plant's oldest block.

Description: B-14 was a six-story-plus-basement, 76.3-by-100.2-foot wood-framed structure with brick foundations and bearing walls, wood and cast-iron columns, and wood floors. The columns, most 14 feet apart north-south and 12 feet apart east-west, formed an array of 6-by-7 major structural bays. Near the north wall, a 1.8-foot-wide bay helped stretch the floor support system to Grand Street (Figures 2 and 3). All window masonry openings in the stretcher-bond-only facades were segmentally arched, with flush brick arches and cast stone sills. The six-bay Grand Street facade had one wide window per structural bay; the thirteen-bay Greene Street facade had two narrower windows per bay except for single windows in the northwest-corner stairwell. Above the ground floor, all original windows were replaced with obscure-glass-block infilling, louvers and hoppers. The original 6/6 wood-frame double-hung windows were retained on the ground floor, covered with metal security mesh. Ornament was limited to six-pointed iron star washers between the windows at the lintel level, and a Romanesque-Revival-inspired, dentillated and corbelled cornice at the parapeted roofline with bluestone coping along Green Street. A steel-framed, stucco-clad, 15-by-26-foot extension of the fifth floor, with two dormer-like skylights housing fans, rested on the roof of adjacent B-15 (HAER No. NJ-71-O). The slightly-pitched, bituminous-covered wood roof had skylights, fans, and a corrugated-metal-clad monitor with louvers over a sixth-floor mezzanine (SOUTH ELEVATION...; WEST ELEVATION...)

The Grand Street facade ground floor had a one-story, 10-by-10-foot brick guard booth attached to and blocking its westernmost bay. The second, fifth and sixth bays from the west on this level had original windows; the third and fourth bays were

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* Capitalized references are photographs included with this documentation, or with other documentation packages for HAER No. NJ-71 and associated structures.

altered with one pedestrian door and one freight door, protected by an overhead aluminum canopy and connected by a stair and ramp platform (SOUTH ELEVATION...)

The ground floor of the Greene Street facade had original windows in the first and ninth through thirteenth bays from the north. The second bay from the north housed a pedestrian door, the third and fourth bays had a truck bay with paired batten doors, the fifth and sixth bays were infilled, and the seventh and eighth bays had a pair of original wooden batten doors with windows. All original freight entrances had I-beam lintels decorated with six paterae each. The second through eighth bays from the south were covered by an aluminum canopy, and were connected by a stair and ramp platform. A concrete trabeated arch, three stories high, encompassed the third and fourth facade bays on the first through third stories and supported an overhead pedestrian bridge to C-Block (for a description of the bridge, see HAER No. NJ-71-NN). All the basement windows were 6/6 wooden double hung sash, set in a light well and surrounded by a slightly elevated bluestone curb (WEST ELEVATION...)

The B-14 interior had a largely open floor plan, filled with a variety of soap-finishing equipment, and a wooden stairway and freight elevator in the northwest corner. Sliding steel firedoors protected the segmentally-arched opening to the stairwell, and a rectangular opening in the north wall communicating with B-15 (STAIRWELL BETWEEN 4TH AND 5TH FLOORS...; Figures 2 and 3). Finishes included wood floors with some concrete, elastomastic, and steel plate covering, painted ceilings, and brick walls.

Until shortly before its demolition, B-14 retained much of the equipment last used in soap finishing. Equipment installed between c1920-75 created a gravity-dominated, inter-floor production line for turning neat kettle soap into soap bars. The sixth floor had two chilled rolls in the southwest corner, mounted with crutchers fed from neat soap storage tanks on the east side of the fifth floor (6TH FLOOR, CHILLED ROLL...; 6TH FLOOR, DETAIL OF CHILLED ROLL...). Chips generated in the rolls were dried on the sixth floor in a heat exchanger. An alternative process involved a Mazzoni drier, installed in the 1970s on a mezzanine platform near the center of the floor, which flash-heated liquid kettle soap; this drier was later moved to the second floor. Three V-shaped wood and steel bins on the sixth floor, attached to an air filtering on the roof, allowed the chips to cool and reach uniform humidity before dropping into scale hoppers and amalgamators on the fifth floor. The amalgamators mixed the chips with perfumes, colors and other ingredients, some of which were stored in circular tanks east of the elevator on the north wall (5TH FLOOR, VIEW

SOUTH OF KETTLE SOAP STORACE TANKS (RICHT) AND WEIGH HOPPERS OVER SITES OF REMOVED AMALGAMATORS (LEFT); DETAIL OF AMALGAMATOR REMOVED FROM 5TH FLOOR...).

In the center of the fifth floor, four large wood bins stored amalgamated chips, and moved the chips into chutes dropping to multi-roll soap mills on the third floor (5TH FLOOR, FOUR WOOD BINS...; 5TH FLOOR, INTERIOR DETAIL TO WEST OF SOAP BIN No. 4...; 3RD FLOOR, COLGATE-DESICNED SIX-ROLL TOILET SOAP MILL...; 3RD FLOOR, J.M. LEHMANN CO. FIVE-ROLL TOILET SOAP MILL...). Milled soap ribbons were conveyed or dropped to double-barreled vacuum plodders on the second and fourth floors, which extruded long soap bars to final production lines of cutters, presses, and wrappers. Waste from the presses was conveyed to the fifth floor for re-manufacture (DETAIL OF REMOVED PLODDER (UPPER HALF) FROM HOTEL SOAP LINE No. 6...; DETAIL OF REMOVED PLODDER (LOWER HALF) FROM HOTEL SOAP LINE No. 6...; 4TH FLOOR, HOTEL SOAP LINE No. 6 TO SOUTHWEST...; 4TH FLOOR, HOTEL SOAP LINE No. 6 TO NORTHEAST; DETAIL OF HENKEL PELLETIZER FROM B-14). Toilet soap case sealers and conveyors handled finished goods in the southeast part of the second floor, including the alley-bridging structure between B-14 and B-13, and in an enclosed portion of the latter building (HAER No. NJ-71-M, SECOND FLOOR WEST BAY TO NORTH). Conveyors beginning in the concrete-block-enclosed fourth floor east bay moved finished products into G Block via the bridge, and did a conveyor next to the fourth floor soap finishing lines (4TH FLOOR, HOTEL SOAP LINE No. 6 TO SOUTHWEST...). The process was directed from small partitioned enclosures on the third and fourth floors.

The first floor of B-14, along with the adjacent level of B-15 (HAER No. NJ-71-O), contained the principal shops and storage areas to support equipment throughout B Block and other parts of the Jersey City plant. B-14 support areas included machine and carpenter shops, and storage space. The basement, used to store mechanical parts, had a 27-by-20-foot extension under Grand Street (Figures 2 and 3; 1ST FLOOR, MACHINE SHOP...).

History: Colgate & Company acquired the site of B-14 in small parcels between 1867 and 1903, and built the structure in the latter year for the purposes described above. Original designers or contractors are unknown, but it is likely that consulting engineer William P. Field was involved, as he was on most large Colgate structures built c1903-10. It is likely that B-14 was built not only to enlarge operations, but to accommodate larger equipment needed to introduce the chilled-roll soap chip production to the Jersey City plant. This process was essentially followed throughout the history of B-14. There were myriad changes in equipment and equipment layout, but very few changes to the building other than the window alterations, canopy,

bridge, mezzanine, and monitor noted above, and possibly installation of a new freight elevator after 1943 (cf. Figures 2 and 3). The structure was demolished in 1989.

Sources:

Plans and Drawings

Colgate-Palmolive Company retains linen or blueprint copies of most, though not all, plans and drawings made for B-13. Few surviving plans pertain to the structure; these are listed below. Over 150 other plans of equipment and operating hardware are not listed. As of late 1989, these documents are maintained by the engineering department in the plant's L Block (HAER No. NJ-71-SS). Future researchers should contact the company's Office of Corporate Communications at 300 Park Avenue, New York, NY 10022, for access.

Anonymous

1903 Factory Building for Colgate & Company, Jersey City, N.J. [fragmentary series of numbered blueprint drawings; most of the title blocks are missing]:

2-1004. 2nd Floor Plan.
2-1005. 3rd Floor Plan.
2-1006. 4th Floor Plan.
2-1009. Longitudinal Section.
2-1010. (Section Drawing).

Colgate & Company/Colgate-Palmolive-Peet Company/Colgate-Palmolive Company

1904 B-14 Building, 6th Floor Plan. Dwg. No. 2-1156.

1943 Plan Showing Present Layout of 1st Floor, B-Block, Buildings 1, 2, 14, 15. Drawing No. 2-2488.

1971 First Floor Plan of B-1, B-2, B-14, & B-15. Dwg. No. 2-6353.

1975 Machine Shop and Millwright Areas. No dwg. no.

Construction Specialties, Inc. [Cranford, NJ]

1971 [untitled details of extruded aluminum canopy] Dwg. No. 333-26778.

Otis Elevator Company

1903 Freight Elevator/Grand & Green [sic] Sts., Jersey City, N.J. Contract 13317, Dwg. No. C-440.

Turner Construction Company and Colgate-Palmolive-Peet Company, Plant Engineering Division

1944 Survey of Buildings B-1, B-2, B-15. (Plot Plan). Drawing No. 2-2632.

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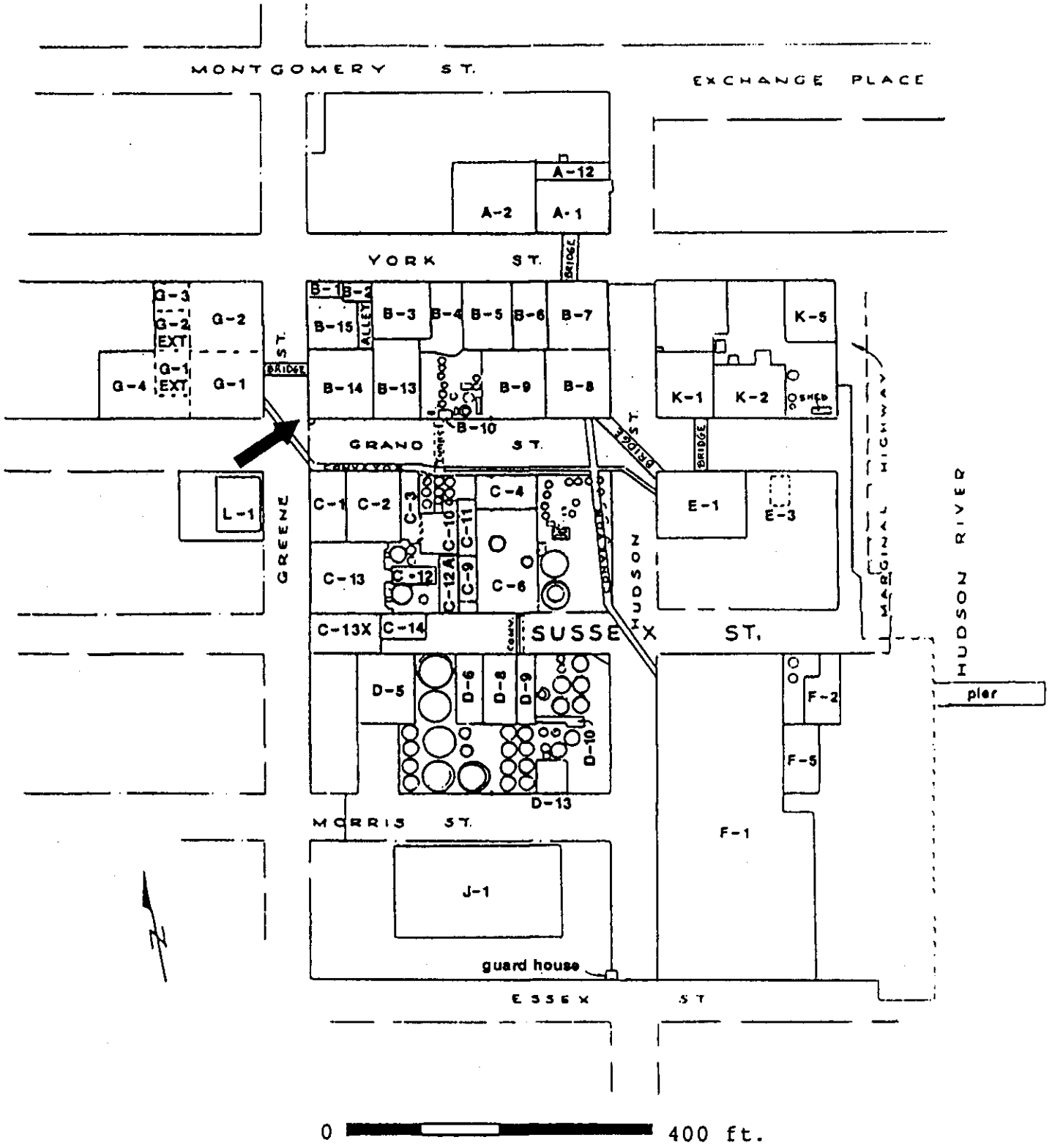

Figure 1. LOCATION OF B-14 AT COLGATE JERSEY CITY PLANT